

MAXWELL JONES

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EDUCATION

Carnegie Mellon University '23, Pittsburgh, PA

Expected Graduation: May 2023

Bachelor of Science, Artificial Intelligence and Math

GPA: 4.0/4.0

- Fundamentals of Programming and Computer Science, Principles of Imperative Computation
- Calculus I, II, Linear Algebra, Physics I, II
- (15-151) Intro to Discrete Math TA, Great Theoretical Ideas in Computer Science Tutor

Thomas Jefferson High School for Science and Technology, Alexandria, VA

2015-2019

High School Graduate

GPA: ~3.6

- Multivariable Calculus, Complex Analysis, Differential Equations

PROJECTS AND SKILLS

Coding

- Python, Java, C, SQL, Julia, Javascript, HTML, Sklearn, Keras, NumPy, Latex
- Proficient with neural networks, random forests, pathfinding algorithms (Dijkstra, A*), Traveling Salesmen Problem, Game AIs (heuristic, negamax, alpha-beta pruning)

Projects

- Helped create **WalkSafe**, a program that outputted **safe and efficient** walking paths given a start and end point at night in dangerous areas, using a over maps API, A*, and crime data at **TartanHacks 2019**
- Competed in an online AI housing competition implementing **random forests** through Sklearn.
- Coded an algorithm that played a game of **Othello** against a human using a heuristic and negamax/alpha beta pruning for finding new moves.s
- Used Python to make a **two-layer neural network** with six hidden nodes without the use of libraries. I used this network to test my understanding of neural networks.
- Created a website to bring together young origamists, in **HTML, Javascript, and Python**, with both front end and back end capabilities. **Hashing** used to keep passwords safe, **cookies** used for easy logging in.

LEADERSHIP AND EXPERIENCE

Carnegie Mellon University

- Treasurer for SPIRIT, CMU's Black Student Organization
- Origami Club Executive Board Member
- Club Basketball
- CMU SCS Social Media Ambassador
- Member of Kappa Sigma Fraternity

Fiat Chrysler Automobiles Internship

Summer 2020

- Worked with the data science team to optimize the HR Absenteeism prediction model
- Used idea behind Meta Analysis to add cross referenced variables across plants to model

Origami

- Wrote a column on young origamists in *The Paper*, a national origami magazine.
- Created an origami website for young origamists to share work.
- Taught origami in multiple countries across three continents.

Personal Computer Science and AI Tutor

- Group Java tutor for high school/middle schoolers and one on one AI/Python Tutor.